

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### T M D Friction

#### Virginia's A.L. Philpott Manufacturing Extension Partnership

#### Tmd Friction Begins Its Journey Into Lean

##### Client Profile:

TMD Friction, Inc.'s Dublin, Virginia plant has been designing and manufacturing disc brake pads for passenger cars and light trucks since 1991. These parts are then sold to major original equipment manufacturers and to the automotive replacement part market. This site currently employs approximately 280 workers.

##### Situation:

TMD Friction's Dublin plant has a reputation for quality and outstanding customer service that has led to steady business growth. At the same time, pricing pressure continues to increase. The plant was rewarded for its excellent performance with the approval of several million dollars of capital to simultaneously increase plant capacity and reduce production costs. Because all this expansion had to be accomplished within the existing property, TMD's managers decided to try lean manufacturing as the vehicle to accomplishing these goals. TMD approached the Manufacturing Technology Center (MTC) based at Wytheville Community College regarding lean implementation assistance. MTC is Virginia's A.L. Philpott Manufacturing Extension Partnership's (a NIST MEP network affiliate) service delivery partner responsible for manufacturers in southwestern Virginia.

##### Solution:

MTC worked with TMD executives to develop a lean implementation plan modeled after the proven "Lean Roadmap" approach. MTC delivered Principles of Lean Manufacturing (Lean 101) workshops, followed by value stream mapping events to identify inefficiencies and bottlenecks in the production process. MTC supplemented this training with various kaizen events to help TMD move from its "current state" to a more efficient "future state" production system. Along the way, TMD learned to identify process wastes, and experienced the benefits of the "flow" created in production cells. The company also benefited from more in-depth training on some of the specific lean tools from the 200 level courses such as 5S, Changeover Reduction, Total Product Management, and Cellular Flow.

These kaizen events, coupled with basic training, resulted in dramatic improvements at the plant. TMD will be able to reach its expansion goals within the available space, has effectively reduced production costs, and continues to embrace the philosophy of continuous improvement by planning more

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

lean events and training for the future.

### **Results:**

Reduced work-in-process inventory by 50 percent.

Reduced process lead times by 50 percent.

Increased labor productivity by 20 percent.

Decreased required floor space for existing operations by 20 percent.

Improved plant floor organization, safety, and cleanliness.

### **Testimonial:**

“The Manufacturing Technology Center is a hands on type of consulting group. MTC provided TMD with very comprehensive training, lean solutions, and lean tools. Since we started the project in 2000, we were able to secure jobs, shorten the lead-time, and save money in the areas where lean principles were implemented. The input of MTC has proven very valuable and we will continue to use their expertise.”

Torsten Kaffine, Manager - Continuous Improvement